

EXHIBIT 37
RESPONSE TO LAC 33:VII.523 (IT QUESTIONS)

RESPONSE TO "IT QUESTIONS"
(And LAC 33:VII.523)
Submitted in Conjunction with Slidell Landfill, L.L.C.'s
Major Permit Modification Application
October, 2004 (Revised April 2006)

INTRODUCTION

This submittal is made in support of the request by Slidell Landfill, L.L.C. ("Slidell Landfill") to modify its existing solid waste permit, No. P-0345. Slidell Landfill has submitted a Major Permit Modification Application, dated October, 2004, as revised March 2005 (the "Application"). Essentially, Slidell Landfill seeks to join the newer portions of the facility permitted in September, 2000, with older portions of the facility, thus creating a fully permitted, environmentally protective Type III waste disposal facility. Slidell Landfill will, thus, be able to accommodate all of the Type III waste disposal needs of the residents of St. Tammany Parish for years to come.

Currently, Slidell Landfill is fully permitted to dispose of Type III waste (construction and demolition debris and woodwaste) at its facility in Slidell, Louisiana. As originally permitted in September, 2000, the life span of the landfill was approximately ten to twenty years, given the permitted final contours of the landfill. However, Hurricane Katrina radically altered this timetable. Because of the huge volume of Type III and other approved hurricane-debris, the landfill has nearly reached its capacity under its current permit. At the time of this submittal, the lifespan of the landfill is no longer measured in years, but rather weeks. Granting this modification is essential to assuring that St. Tammany Parish has adequate capacity in the future to safely dispose of Type III waste in a manner most protective of the environment.

SECTION 523 AND THE 'IT QUESTIONS'

The "IT Questions" are made an integral part of the solid waste permit application process through LAC 33:VII.523, which requires that permit applications contain responses to the specific questions in order to facilitate the evaluation of the application. The "IT Questions" themselves, which are embodied in Section 523, evolve from the Louisiana Constitution of 1974, Art. IX, Sec. 1, and the principles enunciated by the Louisiana Supreme Court in *Save Ourselves, Inc. v. Louisiana Environmental Control Commission*, 452 So. 2d 1152 (La. 1984), as refined by the Court of Appeals, First Circuit, in *Blackett v. Louisiana Department of Environmental Quality*, 506 So. 2d 749 (La. App. 1 Cir. 1987) and *In re: Rubicon*, 95-0108 (La. App. 1 Cir. 2/14/96), 670 So. 2d 475, rehearing denied, 3/29/96.

The secretary of the Louisiana Department of Environmental Quality ("LDEQ") has been designated as the primary public trustee of the environment. He must consider and follow the will and intent of the Louisiana Constitution of 1974 in making decisions regarding the environment. La. R.S. 30:2014(A)(4). The secretary fulfills his duty as the primary public trustee, and thereby justifies the discretion afforded him in permit decisions, through the consideration and detailing of three broad issues:

- 1) Have the potential and real adverse environmental effects of the project been avoided to the maximum extent possible;
- 2) Does a cost benefit analysis of the environmental impact costs balanced against the social and economic costs demonstrate that the latter outweighs the former; and
- 3) Are there alternative projects, alternative sites, or mitigating measures which offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits.

Rubicon, 670 So. 2d at p. 483; see also *In re: American Waste and Pollution Control Co.*, 93-3163 (La. 9/15/94) 642 So. 2d 1258, 1266. ¹ This submittal will address these three inquiries.

BACKGROUND

Slidell Landfill is a fully permitted solid waste disposal facility, located in St. Tammany Parish at 310 Howze Beach Road in Slidell, Louisiana. Under its current permit, it is allowed to dispose of Type III waste (construction and demolition debris and woodwaste). ² The facility is divided into Cell Nos. 1 and No. 2 and an old landfill. Cell Nos. 1 and 2 were permitted by the LDEQ on September 26, 2000 through the issuance of Permit No. P-0345.

Cell No. 2, consisting of approximately 16.5 acres and approximately 900,000 cubic yards of capacity, began receiving Type III waste after the appropriate LDEQ approval was received in April, 2002. Since Hurricane Katrina, Cell No. 2 may have reached its permitted capacity and height allowance.

Cell No. 1, consisting of approximately 9 acres and approximately 600,000 cubic yards of capacity, was not fully constructed at that time. After Hurricane Katrina, construction work was completed and proper authorization was provided by LDEQ to use Cell No. 1 for the disposal of hurricane-debris and Type III waste. The capacity of Cell No. 1 is limited. At the current rate of receipt, Cell No. 1 will soon reach its permitted capacity and height allowance.

Directly south of, and abutting, the current landfill is located what is commonly referred to as the 'old landfill,' which is approximately 20 acres in size. It is part of the landfill known as the Johnny F. Smith Construction and Demolition Debris Landfill. The landfill ceased accepting waste around April, 2002. The old landfill is under an Order to Close, No. 0246-A-2, issued by the LDEQ.

In the September 26, 2000 permitting of Cell Nos. 1 and 2, LDEQ provided a Basis for Decision ("BFD") in which was performed an extensive and comprehensive analysis of the "IT Questions," a review of the landfill's compliance history, and a capacity determination. The BFD is attached hereto and made a part hereof as Attachment A. After reviewing the application, the administrative record, and an opposing comment to the application, the LDEQ concluded in the BFD that potential adverse environmental impacts were minimized to the maximum extent

¹ Section 523 separates Issue 3 into three distinct inquiries.

² Pursuant to the various Emergency Declarations and Administrative Orders issued by LDEQ in response to Hurricane Katrina, Slidell Landfill is also authorized to receive 'hurricane-debris,' as that term is defined, during the pendency of the emergency.

possible, that the social and economic benefits of the facility outweighed any potential environmental impacts, and that no alternative sites, projects, or mitigating measures offered more protection to the environment than the proposed project without unduly curtailing non-environmental benefits. The LDEQ specifically found that the project "will be protective of human health and the environment and hereby issues Standard Permit P-0345." BFD, p. 12. Slidell Landfill maintains that the LDEQ's decision is still correct and amply supported by existing facts.

Although Slidell Landfill received substantial damage during Hurricane Katrina, protective measures incorporated in the facility operation allowed Slidell Landfill to recover and play an integral role in the regional recovery effort. Since the hurricane, it has received approximately 1.5 million cubic yards of waste for disposal. Obviously, such a large volume required the invocation of the provisions of the various Declarations of Emergency and Administrative Orders (the "Emergency Order"). Specifically, the Emergency Order allowed permitted facilities to accept hurricane debris for disposal without the need to first modify existing permits as a means addressing the increased demand for capacity arising from the storm event. Additionally, though, the Emergency Order required that a permit modification addressing long-term changes on operations and disposal which occurred during the emergency be submitted no later than the expiration of the latest Emergency Order.

The current application, although it was initially submitted prior to Hurricane Katrina, is also intended to address the changes to operations and disposal that occurred as a result of the hurricane. Essentially, the application seeks to join the old landfill with the two current cells. The 'airspace' of the landfill will be increased. The current permit allows Cell Nos 1 and 2 to achieve 3:1 slopes, but only up to 19 - 21 feet above mean sea level. The application simply requests that the 3:1 slope be allowed to continue up its natural gradient to a height of approximately 130 feet above mean sea level. Additionally, the horizontal 'footprint' of the three cells will not be substantially increased. Essentially, the expansion of the horizontal 'footprint' will occur within the perimeter levees of the landfill.

PRELIMINARY CONSIDERATIONS

Before an in-depth discussion of the 'IT Questions' is undertaken, several important preliminary considerations should be noted. As the 'IT Questions' are reviewed, it is suggested that these considerations be kept in mind.

As mentioned above, the BFD is a comprehensive analysis of the 'IT Questions' as they applied to the prior expansion of the facility from the old landfill into the currently permitted Cell Nos. 1 and 2. The analysis, facts, and conclusions set forth in the BFD have changed little since its issuance in September, 2000, except perhaps that the facility has become even more environmentally protective (as highlighted in subsequent sections). In brief summary, extensive work has been conducted at the facility, in partnership with the U. S. Corps of Engineers and LDEQ, to enhance the perimeter levees and route the flow of water to a central holding area, from which all water will be subject to a rigorous pre-discharge sampling and analysis program. Additionally, a new and detailed Stormwater Pollution Prevention Plan is a significant supplement to the plans and procedures noted in the BFD and in the application leading to the BFD itself. The rationale and basis for granting the expansion into Cell Nos. 1 and 2 remain as

valid and viable for the present modification, if not more so based on the environmental upgrades, as they were when LDEQ relied on them in the 2000 BFD.

The next consideration is how Slidell Landfill was impacted by Hurricane Katrina. Although Slidell Landfill suffered extensive physical damage to its buildings, equipment, and records, it was able to recover and provide its capacity to satisfy the immediate need for disposal capacity in the wake of Hurricane Katrina. For this reason, it has approached the limits of its permitted capacity. In a short period of time, the length of which depends on the volume of waste received at the facility, Slidell Landfill will be required to begin closure. If this is required, Slidell, St. Tammany and the northshore as a whole will lose the availability of an ideally suited, permitted landfill that can easily manage the volume of Type III waste that will be generated as the area rebuilds. Without Slidell Landfill, LDEQ will be forced to permit other sites, thus purposefully and unnecessarily creating more brownfield locations in an aesthetically pleasing area that takes great pride in its green spaces.

Slidell Landfill is ideally suited for continued use as a disposal facility for a number of reasons. For example, the area in which Slidell Landfill is located is already zoned by St. Tammany Parish as M-2 (Intermediate Industrial). Further, the landfill does not violate any of the local land use requirements. *Id.* Because of the zoning of the area, Slidell Landfill is located in an area of compatible land use. Slidell Landfill is in an area that is already heavily commercial in nature. Multiple commercial establishments, such as car dealerships, buildings, and other businesses, are located along Howze Beach Road. Additionally, Slidell Landfill is located directly adjacent to the Coastal Waste facility, a residential solid waste pick-up station. The current site has been commercial and industrial in nature for some time.

Further, the efficient and continued collection, transportation, and disposal of Type III waste is necessary to maintain and enhance the quality of life enjoyed by residents of St. Tammany Parish. An efficient system ensures that costs are minimized. Slidell Landfill, in providing St. Tammany with such a system for Type III waste, provides a necessary and cost-effective public service for the residents of St. Tammany. Further, having a local option for disposal reduces the tendency for illegal dumping.

Finally, Slidell Landfill has worked cooperatively with LDEQ. It has voluntarily supplied information to the LDEQ and welcomed LDEQ's compliance assistance. Slidell Landfill has gone 'above and beyond' the requirements of the regulations to ensure that every aspect of its day-to-day operations conforms to and exceeds all measures of environmental performance. Slidell Landfill remains committed to this goal.

With the foregoing preliminary consideration established, Slidell Landfill addressed Section 523 in the context of this modification request.

ANALYSIS

1) Have the potential and real adverse environmental effects of the project been avoided to the maximum extent possible?

Yes, the potential and real adverse environmental effects of the project (including impacts to groundwater, surface water, and air quality, aesthetic impacts (visual/noise), safety risks, impacts to surrounding property values, wetlands impacts, and adverse impacts to 'sensitive environmental areas') have been avoided to the maximum extent possible.

LDEQ found as part of the prior expansion that the "potential and real adverse environmental effects of the facility have been avoided to the maximum extent possible." BFD, p. 3. LDEQ reviewed the groundwater and surface water impacts, finding that such media "will be protected" due to, among other things, the monitoring required under the facility's Louisiana Pollution Discharge Elimination System ("LPDES") permit, the lack of leachate generated at a Type III facility, and the predominantly clay barrier existing under the maximum point of excavation BFD, p. 4. These conditions have not changed at all. Additionally, the LDEQ noted that emissions from the facility "pose little threat to the air quality" because Type III waste does not produce methane or create an odor problem. *Id.* Again, these conditions have not changed. Finally, Slidell Landfill proposed and implemented various protective measures, such as waste receipt and acceptance procedures to ensure that inappropriate waste is not disposed at the facility and a fire and safety program. Yet again, these procedures and programs are still in effect and used at the facility. Considering these additional "protective measures," LDEQ found the "adverse environmental impacts to groundwater, surface-water, and air have been minimized." BFD, p. 5. The facts and circumstances supporting the issuance of the BFD have not changed over the last several years. The conclusions in the BFD that supported the expansion of the facility are clearly applicable and relevant to the current expansion.

The BFD reviewed groundwater, surface water, and air quality impacts and correctly concluded that protective measures were in place to minimize those impacts to the maximum extent possible. This analysis will list and consider not only impacts to groundwater, surface water, and air quality, but also will go well beyond those impacts and evaluate additional potential adverse environmental effects, including aesthetic impacts (visual/noise), safety risks, impacts to surrounding property values, wetlands impacts, and adverse impacts to 'sensitive environmental areas.'

Surface Water Impacts

The potential surface water impacts from the facility that may occur as a result of facility operations include direct discharges through permitted outfalls, spills, and run-off. The BFD found that surface water discharges would be minimized as the discharges would be monitored in accordance with the LPDES permit.

The facility is permitted to discharge to surface waters pursuant to LPDES Permit No. LA0105465. The permit was issued on December 7, 1999, effective January 1, 2000. A timely renewal was submitted and has been deemed administratively complete.

Water in Cell No. 1 is now routed to Cell No. 2 for discharge through Outfall 002. Cell No. 2 also discharges through Outfall 002. Outfalls 003 and 004 (the sanitary discharges and the equipment and vehicle wash discharges) flow into Cell No. 1, for ultimate discharge through Outfall 002, as mentioned above. Outfalls 003 and 004 are sampled prior to their discharge into Cell No. 1. Thus, all discharges from the facility are subject to voluntarily procedures noted below.

The discharges from the facility consist primarily of stormwater, only a small portion of which has actually contacted the Type III waste. Outfalls 001 and 002 flow into an unnamed ditch, then into an unnamed canal, then into Schnieder Bayou, and ultimately into Lake Pontchartrain. There are no drinking water uptakes in the area, nor is the unnamed canal and Schnieder Bayou designated as scenic waterways. In fact, there are no scenic streams or critical habitats in the area which may receive the facility's surface water discharges.

Since LDEQ's September, 2000 approval of the expansion into the facility's currently permitted footprint, and the favorable conclusions in the associated BFD, there have been recent significant upgrades to the facility's operations and procedures which make potential adverse impacts to surface water even less likely. Within the last year and a half, the facility has voluntarily upgraded the facility, adopted more stringent discharge limitations and procedures, and updated plans have been implemented.

Facility Upgrades

In close coordination with the U. S. Corps of Engineers ("Corps" or "COE") and LDEQ, Slidell Landfill has performed, and continues to perform, work at the facility that is designed to substantially upgrade the facility so that even more protection is provided to the surrounding environment. The work encompasses projects at the landfill itself, and also the neighboring Coastal Waste facility. While the work at the landfill itself (i.e., the enhancement of the perimeter levees and the flow of water to a central area for treatment) is significant on its own, the entirety of the project, both at the landfill and the Coastal Waste facility, will be discussed so that a full description of all environmental enhancement will be provided.

Slidell Landfill solicited the input and approval of both the LDEQ and the Corps. Slidell Landfill met with LDEQ on two occasions (one meeting with Permits and another with Enforcement) to discuss and outline the facility enhancement plan. LDEQ favorably received the plan and provided its approval. The Corps itself was extensively consulted and provided its approval. Thereafter, the work began and, as of the date of this submittal, continues. Slidell Landfill remains committed, and looks forward, to completing the work in the very near future.

The plan, as presented, consisted of the following items:

1. Reform and build the perimeter levee on the south, west, and east side of the landfill, with the levee joining the existing levee on the east side and running along the entire length of the west side of the landfill.
2. Reform and build the ditch on the inside of the perimeter levee. The bottom and sides of the ditch will be lined with naturally occurring or recompacted clays.

3. Slope and grade the Coastal Waste parking lot such that all water within the inner berm flows into a dedicated pond located to the west of the landfill, outside of the perimeter levee. If necessary, chlorine treatment may be added prior to discharge.
4. Reform and build the perimeter levee surrounding the Coastal Waste site along Schneider Canal and along the existing drainage ditch behind the pick-up station and the shop building.

A perimeter levee exists along the south side of the landfill and generally runs north along the east side of the old landfill cell and Cell No. 2. The levee was/will be reformed along the south and east sides of the landfill to a height of 9.5 feet (the 100-year flood elevation). For most of this area, the levee already exists and the work will only require placing materials on top of the existing feature and, consequently, widening the base to a certain degree. Additionally, a levee will be built along the west side of the landfill. In this way, the entire active portion of the landfill will be sealed within the perimeter levee. The levee will ensure that all water is held on-site for treatment prior to discharge, thus assuring an additional means of controlling the quality of the discharges.

A ditch currently exists on the south side of the landfill, just inside the existing levee. The purpose of the new ditch is to route water to treatment areas to maximize the quality of the discharges. The ditch, with two feet of recompact or naturally occurring clay at its base, will be re-formed along the south side of the landfill. A high point or ridge will be placed in the ditch in the center of the south side of the old landfill cell, such that water will flow east and west along the south side of the landfill, and eventually flow into the pond in Cell No.2.

A two-part project was proposed for the Coastal Waste property. First, to minimize the amount of water flowing onto the site, the levee along Schneider Canal was reformed and a levee built along the discharge ditch from its intersection with Schneider Canal. Second, to ensure that potentially contaminated water that is generated on-site may be sampled and properly treated before discharge, the Coastal Waste parking area was/will be bermed, the area sloped and graded, and all water (and other discharges) will be routed to a central pond located west of the landfill (and outside the perimeter levee). These projects reduce the amount of water coming onto the Coastal Waste property (which will decrease the amount of water that ultimately requires treatment and discharge) and will ensure that all discharges from Coastal Waste are properly treated prior to discharge. Reducing the amount of water requiring treatment will ensure that any such treatment is more effective, thus increasing the quality of discharges.

The benefits of this project are clear. During high tide, water backed up in Schneider Canal and the drainage ditch and ultimately flowed onto Coastal Waste property. The increased amount of water made treatment more difficult. Reducing the amount of water flowing onto the property serves to reduce the amount requiring treatment, thus increasing the likelihood of higher quality discharges. To accomplish this, the current levee along Schneider Canal was reformed to the 9.5 feet height, matching the Slidell levee. Additionally, the levee was built along the drainage ditch from its intersection with Schneider Canal to a point where the existing elevation equals 9.5 feet. A reduction in the amount of water requiring treatment coupled with use of a central treatment pond ensures discharges from the site will be more than adequately treated and exceed required treatment.

The current parking area was surrounded by an inner berm and the area within the inner berm was sloped and graded such that all water was routed to a central pond, which will be located west of the landfill and outside of the perimeter levee. The Coastal Waste pond will receive only water routed to it from Coastal Waste (although eventually it may receive the discharges from Outfalls 003 and 004 from Slidell Landfill). All currently existing discharges (stormwater, washrack, and sanitary) will be routed to the new pond. The sanitary discharge will be routed to the pond after being treated by the sanitary treatment plant currently on-site. Further, if necessary before discharge, all of the water in the pond will be routed through a chlorine contact chamber for further treatment. In this manner, all Coastal Waste discharges will be routed to one central treatment pond and aggressively treated prior to discharge.

The plan to route all discharges to a central pond, coupled with limiting the amount of water entering the pond through reforming and building the levee to halt ingress of tidally influenced water, will positively benefit the surrounding area. The discharges from the Coastal Waste site will be within all permitted limits, thus minimizing any impact to the receiving waters and surrounding area.

Slidell Landfill and Coastal Waste took every available measure to ensure that impacts are minimized. The following is a partial listing of active measures taken by Slidell Landfill and Coastal Waste during the time that these activities are in progress:

1. The majority of the work performed on the perimeter levees simply required placement of additional material on top of the existing levee.
2. No equipment was placed in any stream, bayou, or other watercourse. The equipment was placed on the landfill itself.
3. Hay bales and silt fences (and other best management practices as appropriate) were erected and maintained along the perimeter of the landfill where work was performed so that runoff was minimized.
4. All applicable standards contained in the water quality general permit for construction activities were complied with.
5. The work and equipment placement was documented and monthly progress reports were submitted.

Through these measures, Slidell Landfill enhanced the protection it provides to the environment. The levees and ditches assist in insuring that no water leaves the site that is not properly treated under the facility's LPDES permit, thus assuring a higher quality surface water discharge into the surrounding environment.

Voluntary Procedures

On October 26, 2004, the facility adopted voluntary procedures for discharging stormwater from Outfalls 001 and 002. Slidell Landfill adopted these procedures to ensure the protection of water quality when discharging through Outfalls 001 and 002 as well as to provide LDEQ with information regarding the nature of the discharges from the facility. The procedures were adopted only after consultation with the LDEQ and the adoption of LDEQ's comments into the final version of the procedures. Note that all water from Cell No. 1 is now routed to Cell No. 2.

Thus, all discharges from Cell No. 1 and Cell No. 2 are subject to the procedures established for Outfall 002 and Cell No. 2.

Generally, the Slidell Landfill imposed upon itself two basic obligations: first, it imposed on itself more discharge parameters than those required under its permit, and second, it imposed on itself a strict set of sampling and analysis procedures which must be met prior to any discharge from Outfall 002.

Slidell Landfill imposed on itself additional discharge parameters than those required under its existing permit. Under its existing permit, daily maximum limits are set for oil and grease and total organic carbon ("TOC") and a maximum and minimum limit is set for pH. Several metals are required to be analyzed and reported but no numerical limit is set. Flow is to be estimated and reported. Under the LPDES General Permit for Construction/Demolition Debris and Woodwaste Landfills (LAG780000, effective September 1, 2001), additional parameters are required that are not found in the facility's existing permit: Total Suspended Solids ("TSS"), Biological Oxygen Demand ("BOD"), ammonia, alpha terpineol, benzoic acid, p-cresol, and phenol. A numerical limit is set for zinc (collectively, the 'self-imposed limits').³ Each parameter has a numeric discharge limit. The facility voluntarily adopted these additional limits.

Slidell Landfill also imposed on itself a strict set of sampling and analysis procedures which must be met prior to any discharge from Outfall 002. In general terms, a sample is taken of stormwater awaiting discharge in Cell No. 2 and analyzed for all of the parameters noted above. If the analysis establishes that permit limits and the self-imposed limits are met, then there may be a discharge from Outfall 002. If, however, the sample of the accumulated stormwater awaiting discharge indicates that any of the limits are not met, then treatment will be done until the stormwater is tested and meets all applicable limitations. In this fashion, there is assurance that permit limits and self-imposed limits are met prior to discharge. Additionally, a sample of the actual discharge is taken and analyzed. If the discharge sample shows any non-compliance, the discharge will cease. As water from Cell No. 1 is routed to Cell No. 2 for discharge through Outfall 002, the procedures for discharges from Outfall 001 and Cell No. 1 are no longer utilized. All water from Cell No. 1 is subject to the procedures noted for Cell No. 2 and Outfall 002.

Through the adoption and implementation of these voluntary procedures, Slidell Landfill minimizes the possibility that any of its discharges impact surface water. Additionally, Slidell Landfill has implemented even further environmentally protective measures, outlined below, that greatly minimize the possibility that contaminants will impact a surface water discharge.

The SWPPP

In December, 2004, a Stormwater Pollution Prevention Plan, a Spill Prevention, Control, and Countermeasures Plan, and Best Management Practices Plan (collectively, the "SWPPP")

³ LDEQ issued an Administrative Order requiring the sampling of only BOD. However, even though the action was stayed by a request for hearing, Slidell Landfill imposed on its self the voluntary procedures outlined herein.

were formally instituted at the facility. The purpose of these plans (which were combined in a single, comprehensive document) is to minimize, prevent, and control the pollution of stormwater discharges. By doing so, the facility thereby minimizes, prevents, and controls the pollutants that may eventually be contained in a discharge from Outfalls 001 and 002.

The SWPPP is a comprehensive document that segregates the facility into five main areas, identifies the possible pollution sources in each, and then details the best management practices and procedures employed by the facility to prevent pollutants from entering stormwater. Various best management practices have been adopted by the facility.

The best management practices reduce spills at the facility. For example, vehicles hauling materials with the potential to drop or track materials are monitored closely. If material does fall from the vehicle, it is promptly cleaned up. Additionally, oils and other such materials are located inside secondary containment or placed on top of containment pallets. Lids and container openings are kept closed when not in use. If spills do occur, then sorbent material is promptly used and disposed of properly. When equipment is serviced, drip pans and absorbent pads are used.

Other best management practices prevent soil erosion. For example, erosion from bare or recently disturbed areas is minimized through planting of seasonal grass or other erosion control measures. Hay bales and silt fences are utilized if significant erosion is anticipated. These practices minimize the amount of solids entering stormwater and thus the pollutants that may enter surface waters.

Other best management practices prevent the creation of leachate. A twelve-inch layer of clay is placed over the exposed material every thirty days. The clay layer prevents precipitation from contacting the Type III waste, thus reducing the possible pollutants that may enter stormwater.

The SWPPP reduces pollutants entering stormwater. In this manner, it reduces the pollutants that may be discharged into the surface waters.

Groundwater Impacts

The potential does exist for groundwater contamination from the operation of the facility. However, the potential risk of impact is minimal based on the nature of the waste received at the facility. To the extent there is a risk of an adverse impact, the risk is minimized to the maximum extent possible because the clay underneath the site will reduce any impacts to groundwater and operational plans will reduce spills.

The facility is located above the southeastern corner of the Prairie Terrace aquifer. There are no known drinking water wells in the vicinity. Area water is generally provided by the City of Slidell or the Parish of St. Tammany.

The nature of the waste received and handled at the facility reduces any potential effect to groundwater. Slidell Landfill accepts only Type III waste, which is defined as construction and demolition debris and woodwaste. By its very nature, Type III waste poses less risk to the environment than municipal solid waste or industrial wastes. Unlike industrial wastes, hazardous

wastes, or even municipal solid wastes, Type III waste simply does not contain similar types or levels of harmful constituents or materials.

LDEQ concurs in this assessment. In the BFD, LDEQ stated that leachate "is not a concern at this facility." BFD, at p. 4. LDEQ noted that, as construction and demolition debris is generally considered non-water soluble, "it is unlikely that significant constituents concentrations will be present." *Id.* Thus, the type of waste received minimizes impacts to groundwater.

The facility also has in place a waste acceptance plan which ensures that only Type III waste is received and disposed of at the facility. Upon arrival at the facility, the material proceeds through a weigh station where the paperwork is checked to determine if the material is noted to be anything other than Type III waste. Once cleared, the load proceeds to the landfill where the deposition of each load is observed. If any material is observed in the load that is not approved or allowed to be disposed of at the facility, it is returned to the customer or placed in a roll-off bin for removal and proper disposal.

Even if Type III waste could be considered to pose a risk to groundwater, the underlying soil is sufficiently impervious to prevent impact to groundwater. Underlying the facility is a natural, predominately clay barrier that is at least five feet thick. The nature of the underlying soils have been documented by the facility on two occasions.

In November, 1997, Soil Testing Engineers, Inc. ("Soil Test") conducted a site investigation in which numerous soil borings were obtained from Cell Nos. 1 and 2 and the side slopes of Cell No. 2. Five soil borings were taken from the bottom of Cell No. 2 and four samples were taken from the side slopes of that cell. Additionally, three soil borings were taken from Cell No. 1 to a depth of thirty feet. The investigation revealed that a low permeable clay exists below the facility. LDEQ, in its BFD, concluded that the clay barrier will "significantly reduce the potential for surface spills to impact groundwater." BFD, at p. 4.

A new study was completed in February, 2005 by Soil Test. The results of the study reinforce and support the prior study. Soil Test concludes that the site is underlain with "stiff clays and silty clays."

Finally, there are operational practices that reduce potential impacts to groundwater. As stated above, the facility has in place an SWPPP which will serve to reduce or prevent spills from even occurring. If they do occur, the SWPPP ensures that they are cleaned-up very quickly prior to the time they could pose a risk to groundwater. Additionally, all fuel tanks, used oil tanks, or other such tanks or containers storing similar substances which could impact groundwater all have sufficient secondary containment. The containment acts as a barrier, preventing these materials ever spilling on the ground and potentially entering groundwater. Instead, spills are held inside the containment, cleaned-up, and disposed of properly.

Air Quality Impacts

The potential adverse effects to air quality posed by the facility include odor and particulate (dust) emissions. Because of the nature of the waste received and the operational practices of the facility, these potential effects are minimized to the maximum extent possible.

As Type III waste generally does not create odor problems, there is little reason to expect that such a problem will exist at the facility. LDEQ concurs, noting that there "is little or no odor problem." BFD, at p. 4. Unlike municipal solid waste, Type III waste is not bio-degradable and methane gas will not be created in appreciable quantities. Although the potential for the creation of dust is present, frequent mechanized sweeping, application of water, and the observance of speed limits will all serve to minimize this potential adverse impact.

LDEQ stated that the facility poses "little threat to the air quality of area residents and businesses." *Id.* Although specifically referring to the creation of methane gas, LDEQ's conclusion validly and equally applies to all aspects of the facility's operations.

Aesthetic Impacts (Visual/Noise)

For this analysis, aesthetic impacts include visual impacts and noise. However, industrial zoning and certain operational restrictions serve to reduce these potential aesthetic impacts to the maximum extent possible.

The area's M2 - Intermediate Industrial zoning creates an industrial and commercial corridor along Howze Beach Road, which runs parallel to Interstate 10. The facility lies partially shielded behind this row of business establishments. In terms of the potential aesthetic impacts, this relative isolation has several positive aspects. First, the industrial setting (e.g., the Delgado Community College and multiple car dealerships) may act to shield the bulk of the facility from view. Second, the traffic on Howze Beach Road and Interstate 10 creates a constant backdrop of noise over which it is virtually impossible to hear any sound or noise emanating from the facility.

The facility is shielded from its surroundings. All facility operations are set-back fifty feet from the property line, creating a buffer zone from its neighbors. Additionally, in normal conditions, no work is conducted after approximately 5:00 p.m. Thus, all noise is eliminated from the facility after that time. The cessation of activities at that time also serves to ensure that nighttime lighting is not a concern to any neighbor.

Safety Risks

The facility does not pose a safety risk, although certain potential impacts are possible. These potential impacts include vector concerns, explosion, or fire. Based on the type of waste received and the operational plans and procedures in place at the facility, these potential impacts are minimized to the maximum extent possible.

Type III waste is not putrescible and does not contain items that could attract disease vectors, such as flies or rats. Additionally, no waste is received that could potentially produce an explosive situation or problem. Practices and procedures are currently in place in which incoming materials are monitored and potentially problematic materials are either returned to the generator or segregated for proper disposal elsewhere. Thus, the nature of the waste and operational practices preclude these adverse impacts.

As with any ongoing activity, the prevention of fires, and immediate reaction to any that do occur, is a high-priority concern. The facility has implemented comprehensive fire prevention and reaction plans which minimize this potential impact.

Fires, open flames, or smoking are simply not allowed in the landfill. Additionally, the above-mentioned procedures regulating the receipt and acceptance of materials for disposal will identify any smoldering or potentially self-igniting materials, which will be immediately dealt with by facility personnel.

The facility has a Fire and Safety Plan. If a fire does occur, prompt reaction and action is assured. First, normal operations will cease and all efforts focused on identifying the exact source and character of the fire. A hazard assessment will be performed. Employees will immediately utilize the fire extinguishers and fire-fighting equipment located on-site. The facility has fire extinguishers, portable water pumps, and ground cover material are on-site. Employees are knowledgeable regarding location and use of the equipment. Concurrently, all appropriate off-site officials will be contacted. Employees will work under the direction of local fire, medical, and other responders upon their arrival. The fire department is located only 1.5 miles away.

In addition to the specific response plans for fires, there are other general safety precautions employed by the facility. First, the facility has a Safety Committee comprised of the Facility Manager, Assistant Facility Manager, and the Operations Manager. The facility manager is also the emergency coordinator. Second, the Safety Committee ensures that the employees are trained in the safety program. Generally, the employees are trained in how to properly and safely perform their jobs, what to do in an emergency situation, and the location and use of fire-fighting equipment. Third, unsafe conditions that may cause fires or other emergencies, such as fueling equipment or a vehicle while it is running, are corrected and reported to a supervisor.

In addition to all of the above precautions, pertinent local authorities have been notified and stated their ability to respond. The local hospital, Northshore Regional Medical Center, has indicated that it has the ability to provide the necessary medical response should a fire or hazardous material incident occur. The local fire department has also indicated its ability to provide all necessary fire-fighting equipment and personnel should the need arise. *Id.* Based on the representations of the local medical facility and fire department, the facility complies with all aspects of La. R.S. 30:2157

Impacts to Surrounding Property Values

One 'non-environmental cost' associated with the facility may be a diminution in property values. In this case, however, property values will not be impacted. The facility adjoins a municipal waste pickup station and is located behind multiple commercial establishments. The closest residential property, which is located on the eastern side of Slidell Landfill, is a series of trailer parks. The trailer parks and the commercial establishments have existed side-by-side with Slidell Landfill for many years without a diminution of property values. There is no evidence to support a claim of any diminution in value due to by the expansion of Slidell Landfill in this already commercialized area.

Wetlands Impacts

Based on the work done by Slidell Landfill, the current modification request does not have a potential effect on existing wetlands as no such actual wetlands exist on the site today where waste disposal will occur. There may have been actual wetlands on-site in the late 1970s when jurisdiction was asserted over wetlands (hereafter called "historic wetlands"). While it is clear that some amount of wetlands did exist at one time on the property, the amount of such wetlands is unknown and may be overstated by even Slidell Landfill's expert. However, because of the activities that occurred under the prior owner, operator, and manager (some of which were specifically approved after wetlands assessment(s) by the U. S. Corps of Engineers on the property), the natural land surfaces, including wetlands, have been transformed through industrial and commercial use. The current owner, operator, and manager was not involved in these decisions and did not become involved in the landfill until 1999 or 2000. Nonetheless, the current owners, operators, and managers are committed to ensuring that all wetlands disturbance on the property are fully and properly mitigated.

Preliminary Considerations

In considering the potential adverse impacts posed to wetlands by the facility, two preliminary points must be made. First, the approval of Cell Nos. 1 and 2 in September, 2000, and the subsequent use of Cell No. 2 in 2002, did not seemingly alter or disturb a single square foot of actual wetlands. Portions of the area had long been used as a borrow pit for such uses as levee construction (generally now Cell No. 1 and parts of the old landfill cell). Aerial photography taken in 1998 confirms that the borrow pit and the old landfill cell were in place, the land had generally been cleared, and the general configuration of Cell No. 2 had taken shape. Thus, actual wetlands were not disturbed in any way as a result of LDEQ's permitting of the two cells in 2000 or the facility's use of Cell No. 2 beginning in 2002 as the contours and general configuration of the facility were in place by that time. The areas along the east side of the landfill, which the Corps has indicated may be wetlands, were not to be used for waste disposal as they were part of existing levees and the buffer zone. Secondly, as with the prior approval mentioned above, the current modification request, when granted, will not alter or disturb a single square foot of actual wetlands where waste disposal will actually occur. The expansion of the facility is mostly vertical in nature as the 'airspace' will be increased through joining of the old and new areas. The horizontal expansion, i.e., the slight enlargement near the approved Coastal Waste pond, occupies cleared areas adjacent to the old 'borrow pit.'

On-site Historic Wetlands

Although no existing, actual wetlands should be disturbed by waste disposal as a result of the requested modification, such may not have been the case at earlier points in the history of the property on which the facility is located. Two assessments of the site, one done by the Corps in 1980 and one recently done by Slidell Landfill, highlight that some amount of wetlands may have existed in the past on the property. However, it is clear from both assessments that the amount of such wetlands is minimal.

In 1980, the Corps conducted an Environmental Assessment on the property and found that only one acre of actual wetlands existed on the assessed portion. At the time, clay from the

site was used as a 'borrow pit' to build and/or upgrade levees as part of the Lake Pontchartrain Hurricane Protection Plan. The original 'borrow pit' on the property (the site of current Cell No. 1) was ending its useful life. An additional source of clay suitable for the project was needed. It was found in the approximately 37 acres adjacent to and directly south of the 'borrow pit' in use (i.e., the area that is now Cell No. 2 and the old landfill cell, which together total approximately 37 acres). The Corps surveyed the site in August, 1980 and found that the excavation of the clay from the new 'borrow pit' "will destroy less than an acre of intermediate marsh and 36 acres of pine forest." Exhibit B: August, 1980, Environmental and Socioeconomic Assessment. The Corps concluded that the "loss of 37 acres of wetlands and pine woods will not have a significant adverse impact of the human environment" and approved the expansion.

The expansion area encompassed 37 acres of an approximately 70 acre site. Only an area of "less than an acre of wetlands" was found in the entire area. *Id.* When the area of the original 'borrow pit' is combined with the 37 acre portion, it is clear that the vast majority of the acreage was not considered wetlands by the regulatory authorities inspecting the site.

In the second assessment, Dana R. Sanders, Ph.D., a wetlands expert, recently completed a full wetlands delineation effort that seems to overstate the amount of wetlands that once existed on-site. Exhibit C. The report, dated December 20, 2004, has been provided to the Corps for its consideration. No formal response from the Corps has yet been received. In Dr. Sanders' report, he correctly differentiates between jurisdictional or 'historic' wetlands (i.e., those that were in existence in 1978 when jurisdiction over wetlands was generally vested in the Corps) and those that may exist today. He notes that no natural land surfaces (i.e., actual wetlands) remain on the site due to forty-five years of activity on the property, such as drainage improvements, excavation of pits, construction of buildings and roads, and deposition of construction waste materials. However, he does conclude that 21.54 acres of jurisdictional or 'historic' wetlands existed on the site around 1978. Of course, between 1978 and 1998, part of the activities mentioned above occurred on the property, leaving the site in such a state such that seemingly no actual wetlands existed on the property by 1998.

As they relate to the landfill itself, Dr. Sanders delineated jurisdictional or 'historic' wetlands stretching from the southern portion of the site (in the area of the old landfill cell) in a generally northwestern direction with a single spur jutting in a northeast direction (into the area permitted as Cell No. 1). The location of the jurisdictional or 'historic' wetlands on the property raises important points relevant to LDEQ's consideration of this issue.

First, the active portions of Cell No. 2 are not located in jurisdictional or 'historic' wetlands. The area along the eastern boundary that is noted as jurisdictional wetlands is seemingly in the buffer zone and is not an area that will receive, or has received, waste for disposal. In regard to the strip of land along the easternmost boundary of the property (which, at this time, is understood to include the levee area along part of Cell No. 2 and areas east of the levee outside of the working area of the landfill), Slidell Landfill is working with the COE to delineate this specific area. Slidell Landfill is willing to voluntarily ensure that no waste is deposited in this area until an 'after-the-fact' permit is obtained, if one is deemed necessary by the COE. Second, the other areas noted as jurisdictional or 'historic' wetlands were developed and exploited well prior to the utilization of this site by the current owners and operators. The old landfill was developed and used for waste disposal at least by the early 1990s. Cell No. 1

was used as a borrow pit for levee building in the 1960s and 1970s. Lastly, Dr. Sanders' delineation highlights (through its finding that no natural surfaces remain) that actual wetlands will not be altered or disturbed in any way by granting the current modification request.

Slidell Landfill's Response

Wetland impacts from the current modification request are non-existent as no actual wetlands should be altered or disturbed. However, jurisdictional or 'historic' wetlands may exist on the property and the current owner and operator are prepared to mitigate or minimize any past harms to actual wetlands. First, upon obtaining knowledge that there was an issue with the Corps regarding wetlands, the facility instituted rigorous land use guidelines and practices to ensure that work is not performed in the areas delineated as jurisdictional wetlands. For example, no earth disturbing activities of any kind were allowed in or close to any area delineated as jurisdictional wetlands by Dr. Sanders. Additionally, even though Cell No. 2 is predominately not jurisdictional wetlands, during this interim period, waste deposition generally occurs away from the eastern boundary of the cell. Second, an 'after-the-fact' permit is being discussed with the Corps. Third, Slidell Landfill and the current owners, operators, or managers are prepared to undertake mitigation activities so that not a single square foot of wetlands will be lost as a result of the operation of this facility over time. Slidell Landfill is prepared to conduct a full mitigation of the 21.54 acres of jurisdictional wetlands (even though the Corps 1980 Assessment concludes that most of such land was classified as non-wetlands). Slidell Landfill, although not able to change the past, is committed to ensuring that, through mitigation, there is no net loss of a single square foot of wetlands. Thus, any adverse impacts from past operations at the facility, if any do exist, will be minimized to the maximum extent possible through mitigation.

Adverse Impacts to 'Sensitive Environmental Areas'

There are no potential impacts to known archaeological sites or historical structures as none are in close proximity to the facility. There are no potential impacts to rare, threatened, or endangered species or critical habitat as none are in close proximity to the facility. There are also no potential impacts to state or federal parks, wildlife refuges, scenic streams, or wildlife management areas. There are no potential impacts to state outdoor recreation facilities as none are in close proximity to the facility..

2) Does a cost benefit analysis of the environmental impact costs balanced against the social and economic costs demonstrate that the latter outweighs the former?

Yes, a cost/benefit analysis demonstrates that the social and economic benefits clearly outweigh any environmental impact costs.

The Basis for Decision

The LDEQ has weighed the costs and benefits of the facility and found that the social and economic benefits of the facility outweigh any potential adverse environmental impacts. The LDEQ noted that Type III landfills in general "are relatively minor operations that present minimal risk." Exhibit A: BFD.

In weighing the benefits, the LDEQ noted that the facility provided savings in disposal costs for the area, employment to area residents, and tax revenues to state and local governmental bodies. LDEQ also noted that the facility satisfied a need for disposal space that curtailed illegal dumping activities. Finally, LDEQ pointed out that the proposed operation "will provide social and economic benefits to area residents and businesses."

LDEQ concluded its cost-benefit analysis by a clear finding that "the benefits as provided by the proposed facility outweigh the minimal environmental impact costs posed by the proposed facility." Since this finding, no change has occurred which would alter this conclusion.

The Potential Environmental Costs

The potential environmental costs of the facility are outlined above. It should be noted that these costs are 'potential' in nature and may never occur. Facility location and operational parameters, as mentioned above, serve to decrease the likelihood that any such costs will ever be realized.

The Social and Economic Benefits

The benefits of the facility far outweigh any potential environmental costs. To maintain the high quality of life the residents of the Northshore expect and to support the projected growth in the area, there must be an efficient Type III waste disposal system. Slidell Landfill has expended the capital resources necessary to create such a system in order to provide this most basic and necessary social service.

Growth Projections

Prior to the hurricane, Louisiana as a whole was expected to experience a 7.5% population growth over the next twenty five years. The population will grow from approximately 4.47 million people in 2000 to 4.8 million in 2030. Source: U.S. Census Bureau (pre-hurricane). St. Tammany Parish itself has experienced, and will continue to experience, large increases in population. St. Tammany's population is expected to grow from approximately 191,000 in 2000 to approximately 253,000 in 2010. Source: U.S. Census Bureau (pre-hurricane). St. Tammany's population is expected to grow from approximately 191,000 in 2000 to approximately 247,000 in 2020. Source: U.S. Census Bureau (pre-hurricane). Although these census numbers pre-date Hurricane Katrina and no reliable numbers have been presented as of the date of this submittal, there will be a measure of growth in St. Tammany Parish. The St. Tammany Parish government and local chambers of commerce are actively instituting rejuvenation and rebuilding projects designed to lure residents to St. Tammany. Additionally, as existing residents rebuild, continued high volumes of Type III waste can be expected.

The Benefits

The above projections highlight that fact that St. Tammany Parish will rebuild and grow. To accommodate this anticipated growth, Slidell Landfill provides unique services to the construction community, the residents of St. Tammany Parish, and to the environment.

Overall, the benefits include: providing efficient and lower cost disposal services through low capital outlays for future expansion, minimal transportation costs, and disposing of a single type of waste; reducing illegal dumping in open or promiscuous dumps; conforming to the long-range plans of the parish; providing services in emergencies and disasters; and stimulating the local economy. Each will be discussed in turn.

Lower Disposal Costs

The expansion of Slidell Landfill offers the benefit of providing more efficient and lower cost disposal services through low capital outlays for future expansion, minimal transportation costs, and disposing of a single type of waste.

First, the current expansion request will result in minimal capital outlays. On the other hand, constructing an entirely new facility to handle the expected growth or needs of St. Tammany will require vast expenditures of capital for property acquisition and site development, all of which must be recouped by the developer and which inevitably leads to higher disposal costs.

Second, to accommodate the growth and rebuilding needs in St. Tammany, residential homes, commercial buildings, and industrial facilities will be constructed. Slidell Landfill offers a local option to local builders, allowing them to properly dispose of Type III waste in a cost effective manner. Transportation costs are minimized as local builders will not have to transport their Type III waste long distances, with the associated increase in transportation costs. These cost savings are, in turn, passed on to consumers in the form of lower construction prices.

Currently, there are no permitted Type III landfills in the area of St. Tammany Parish. There are three other possible disposal sites. The Amid Landfill (which may now be permanently closed) and the Greater Metro Landfill are 40 or more miles away. A new Type III landfill, Highway 90 in Jefferson Parish, is located more than 40 miles away. However, Highway 90 was created as a companion to the River Birch Type I and II landfill and Highway 90 will receive the bulk of its waste from Orleans Parish. In any event, transportation costs to all three possible candidates are cost-prohibitive for St. Tammany Parish consumers.

Third, while a Type I and II facility may receive Type III waste, they normally do so at an increased disposal cost. A Type III facility, because it is devoted exclusively to the disposal of Type III waste, is able to offer lower disposal costs. Again, this in turn lowers the construction costs which are passed on to consumers.

There are a number of Type II landfills in southeastern Louisiana. Woodside Landfill in Livingston Parish, Tangipahoa Regional Solid Waste Facility in Tangipahoa Parish, Choctaw Road Landfill in Washington Parish, and River Birch Landfill in Jefferson Parish offer disposal alternatives. However, transportation costs become a factor and, because these landfills accept waste other than Type III, their disposal costs are greater than those of Slidell Landfill. Additionally, utilizing scarce Type II landfill space for Type III waste is a misuse of landfill resources. The capacity of Type II landfills should be preserved as much as possible so that their useful life is lengthened as long as possible.

Reducing Illegal Disposal

Slidell Landfill also provides the benefit of assisting in the proper disposal of Type III waste. Because a lower cost alternative exists for the public to dispose of its Type III waste, the amount of debris that is disposed of illegally is reduced. Open dumping and promiscuous dumps will be reduced. Slidell Landfill also assists in ensuring that waste materials are not dumped in unsightly and unsanitary piles by the side of the road.

Conformance to Long-Term Plans

Expanding the facility also offers the benefit of conforming to the long-term plans of St. Tammany Parish. A coalition of affected stakeholders created the St. Tammany Parish Comprehensive Plan, entitled New Direction 2025. The comprehensive plan is split into nine areas, one of which is land use. In a report entitled "2025 Land Use Plan - Supporting Policy and Statement of Fundamental Principles" (the "Land Use Plan"), the New Directions 2025 land use team compiled its land use vision for St. Tammany in the year 2025. The Land Use Plan is attached as Exhibit D.⁴ An expansion of Slidell Landfill, as requested, conforms to the comprehensive plan.

Predictability of land use is sought by landowners, developers, and residents alike. Land Use Plan, Section III.A.1.b. Obviously, the expansion of Slidell Landfill provides the predictability coveted in St. Tammany Parish. First, the landfill provides predictability in that, during the life of the comprehensive plan, the area utilized for Type III waste disposal will remain in such use. Second, and perhaps more importantly, predictability is provided in that no other area of the parish will be utilized for such use, thereby assuring residents that a new Type III landfill will not be built in or near their residential community.

The landfill expansion also conforms to specific land use considerations highlighted in the Land Use Plan. These considerations include: commercial uses should be limited to concentrated focus areas by major highways or crossroads (Land Use Plan, Sections III.B.1.a and III.B.1.c); and industrial uses should be located in close proximity to interstate highway systems (Land Use Plan, Sections III.B.2.a). Slidell Landfill is located along Interstate Highway 10, close to its intersection with Highway 433, in an area zoned or designated for Intermediate Industrial Use. Between the facility and Interstate Highway 10 are a strip of commercial establishments. The current location, in a grouping of commercial and industrial establishments along major thoroughfares and crossroads, clearly conforms to the edicts of the comprehensive plan. It will be difficult indeed to obtain a site, at this time or in the future, that conforms so readily to the comprehensive plan.

Additionally, the Land Use Plan suggests that the rural character of areas currently having that character be preserved. If the expansion is not granted, a location for a facility providing this service will have to be found. Land Use Plan, Section III.B.7. Preserving the rural character of the parish does not include the location of a Type III facility. *Id.* As areas of rural character are to be excluded from consideration for new Type III facilities, the growth of the parish (i.e., increased residential, commercial, and industrial growth) will occupy the

⁴ Available at www.stpgov.org/nd2025/pdfs/nd2025_policy-principles-finalrev.pdf.

available acreage of the parish, leaving insufficient space or area for a new Type III facility. Without such a local facility, disposal costs will increase, with the increased risk of open or promiscuous dumping.

Finally, the Land Use Plan references the companion Economic Development Element of New Directions 2025. Land Use Plan, Section III.C.3.b. The Land Use Plan acknowledges that economic development will occur and that targeted strategies will be utilized to attract commercial, industrial, institutional, and residential uses in the parish. The Land Use Plan notes that appropriate locations for these activities have been suggested and that most of the suggested activities are near major highways and away from residential areas. Thus, Slidell Landfill, in its current location in an industrial area close to a major highway, is ideally poised to conform to the economic development efforts that will assist and manage the economic growth of the area.

Use In Emergencies and Disasters

The Slidell Landfill also provides the benefit of availability in times of emergency and disaster. Many times over the years it has received the woodwaste (a type of Type III waste) generated by local disasters, such as hurricanes. Wooded areas such as St. Tammany Parish will generate vast quantities of woodwaste in such situations. Slidell Landfill is available to provide disposal services in these emergency conditions.

Local Economy Stimulation

Finally, Slidell Landfill provides a great benefit to the local economy, as evidenced by an examination of expenditures in 2004. It employs approximately 15 people, with a combined payroll of \$432,000. This money is spent locally by the employees at neighborhood groceries, gas stations, restaurants, and other such retail establishments. It further stimulates the local economy by making purchases and contracting for services in the local economy: vendors for equipment maintenance (\$167,000), purchasing fuel (\$106,000), professional fees (\$6,000), insurance costs (\$67,000 in premiums through local brokers), and miscellaneous expenses to other outside vendors \$8,000). In all, Slidell Landfill contributed approximately \$886,000 into the local economy in 2004.

Slidell Landfill pays \$6,949 in property taxes to St. Tammany Parish. Over the expected life of the landfill, this will amount, at current levels, to over \$173,000. It pays \$14,200 in annual fees to the LDEQ. Again, over the expected life of the landfill, this will amount, at current levels, to \$355,000.

Conclusion

The LDEQ found in the Basis for Decision issued in 2000 that the benefits of the landfill, in social and economic terms, clearly outweigh the potential environmental impacts of the facility. The same is true today, but the benefits have become even more pronounced with the compatibility of the expansion with the long-term land use plans for the parish. Approving the current expansion request provides St. Tammany and surrounding parishes a much-needed, low cost, environmentally protective Type III disposal facility for years to come.

3) Are there alternative projects which offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits?

No, there are no alternative projects which offer more protection to the environment than the proposed facility, without unduly curtailing non-environmental benefits. In this regard, a 'no action' alternative, a new Type III facility, a new Type I or II facility, and alternative technologies should be evaluated. Based on this evaluation, there are no suitable alternative projects.

The Basis for Decision

The LDEQ found that the proposed project "offers more protection to the environment than any other possible alternative without unduly curtailing non-environmental benefits." Disposal of Type II waste into a Type I or Type II landfill, and other projects such as recycling/resource recovery, were considered in the BFD. LDEQ reiterated that "there are no alternative projects that would offer more protection." Since the LDEQ's decision, little has changed, except perhaps that the need for a long-term solution to the problem of proper disposal of Type III waste has increased given the projected growth rates in St. Tammany Parish and the comprehensive land use plan for the parish. LDEQ's conclusions regarding the prior permit approval are equally valid today regarding the vertical expansion of the facility.

The 'No Action' Alternative

In the 'no action' alternative, a vertical expansion is not allowed. However, this alternative is not a viable alternative as the benefits of the expansion will be lost and the environment may actually be harmed due to the necessity of permitting a new facility and the increased possibility of open dumping.

As stated above, the benefits of the expansion far outweigh the costs. But, if the expansion is not granted, these benefits will obviously not be realized.

Perhaps the most obvious of benefits that will be lost is the efficient and lower cost disposal of Type III waste. Upon reaching the capacity of the landfill as currently permitted, a different facility must be used. The facility must either be a new facility or an existing facility. Each, however, will increase the costs of disposal.

Permitting a new facility (either Type I, II, or III) in St. Tammany Parish is unlikely. New disposal facilities run directly counter to the Land Use Plan, which seeks to group industries in certain locations, use existing commercial and industrial areas for such purposes, while retaining the rural character of the parish. Thus, finding the actual space to construct a landfill of this type, while adhering to the principles in the Land Use Plan, will be extremely difficult to accomplish. If it is even possible, the huge capital outlay costs to acquire and construct a new facility will cause large increases in the cost of disposal.

Using an existing facility (assuming that all such facilities that are permitted today will be available for disposal when Slidell Landfill reaches its currently permitted capacity) is equally problematic. There are no available facilities close by that offer a viable economic alternative.

Type III waste generators will be required to truck their waste long distances, raising the costs of disposal.

With increased costs, the ability to minimize new open or promiscuous dumps is lost. The incentive to properly transport and legally dispose of Type III waste brought about by low disposal costs will evaporate, leading to the temptation to simply dump Type III waste by the side of the road or in fields. Preserving the rural, picturesque character of the parish, as called for by the Land Use Plan, will become increasingly difficult to accomplish.

Without the expansion, the benefit of conformance with the Land Use Plan is also lost. First, new landfill facilities are simply not contemplated by the Land Use Plan. Second, utilizing a second site in St. Tammany Parish for the disposal of Type III waste runs counter to the principle of using and re-using existing areas for commercial and industrial activity and preserving the rural character of the parish.

Without the use of the landfill, the cost of cleaning up after emergencies, like a hurricane or tornado, becomes more expensive. Scarce government resources will be diverted from helping victims of the disaster to paying higher costs to disposal of woodwaste.

The benefits of a local industry stimulating local economy is lost. Over \$886,000 was directly contributed to the local economy in 2004. This huge direct outlay will be lost, as will the ripple effect on the local economy when those sums are circulated within the community. Additionally, while economic development and the attraction of 'professional' jobs in St. Tammany Parish is a focus of the New Directions 2025 effort, no steady, good-paying employment such as that provided by Slidell Landfill should be forsaken or overlooked. Without the landfill, at least 15 people will be without employment.

Finally, the premature closure of the landfill prior to its full (as requested) capacity runs directly counter to the Land Use Plan. The Land Use Plan states that "aggressive efforts ... should be taken to redevelop existing commercial and institutional sites, and these should be given priority over new developments." Land Use Plan, Section III.B.1.d. In conjunction with this plan, the old landfill cell should be used to its maximum capacity, which in this case means a vertical expansion on top of the north side of it to join with the two currently permitted cells. If the expansion is not granted, existing sites would not be redeveloped, contrary to the plan.

Based on the above, the 'no action' alternative is not a reasonable option.

The New Facility Alternative

The permitting of a new Type III waste facility is a possibility. However, new facilities create costs (both environmental and non-environmental) for the area. A vertical expansion of an existing facility presents none of those types of costs. Siting a new facility that conforms to the Land Use Plan is difficult. The character of rural areas is to be preserved, turning 'greenfield' space into industrial areas is not favored, and existing commercial and industrial areas do not provide sufficient space for a new facility. Construction of a new Type III facility is not a viable alternative.

Likewise, the same reasoning applies to a new Type I or Type II facility that could receive Type III waste. In addition, the cost of disposal in such circumstances is prohibitive. Additionally, the residents of St. Tammany Parish currently have the benefit of a local company, Coastal Waste Services, Inc., that picks up municipal solid waste, brings it to a transfer facility, and then ships it for disposal to the River Birch Landfill in Jefferson Parish. This cost-effective arrangement could last for many years, as River Birch just received an expansion that will offer disposal capacity for decades to come. It would make no sense to permit a new Type I or Type II facility in St. Tammany Parish when its municipal solid waste disposal needs are being met efficiently by existing arrangements.

Alternative Technologies

The alternative technologies of recycling and incineration were evaluated. However, as noted below, this type of waste is not suitable for such technology.

One alternative project is the recycling of Type III waste. However, in order to effectively recycle the waste, it would have to be sorted and stored prior to recycling. Traditionally, costs associated with these labor-intensive operations prohibit this option. Additionally, much of the Type III waste, like demolition materials (e.g., sheetrock), do not easily lend themselves to recycling technologies.

A second alternative is incineration. However, much of this type of waste, like concrete or plastic, does not readily lend itself to incineration, thus ruling out this option. Additionally, air emissions associated with this option may create an unnecessary and unwanted environmental cost.

Thus, there are no alternative projects which offer more protection to the environment than the proposed facility, without unduly curtailing non-environmental benefits.

4) Are there alternative sites which offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits?

No. There are no alternative sites which offer more protection to the environment than this facility without unduly curtailing non-environmental benefits. A traditional alternative sites analysis is not appropriate as this is an existing facility expansion. LDEQ, in the BFD, reached a similar conclusion in the prior expansion request. BFD, at p. 7.

Two important points should be considered as this alternative sites analysis is reviewed. First, Slidell Landfill is an existing facility. Second, the modification will simply allow an increase in 'airspace' and a slight expansion of the horizontal 'footprint.' No new technology will be used. No new waste streams will be received. Nevertheless, Slidell Landfill has conducted an alternative sites analysis that utilizes the principles established by *Save Ourselves* and its progeny.

An initial consideration in the alternative sites analysis included defining an appropriate 'service area.' In this regard, business planning and decision-making are highly relevant. *In re: Shintech*, 2000-1984 (La. App. 1 Cir. 2/15/2002), 814 So. 2d 20. In *Shintech*, the company made a "business decision" to locate its facility in the immediate vicinity of its largest supplier of raw

material, the Dow plant in Plaquemine, Louisiana. *Shintech*, 814 So. 2d at p. 22. The First Circuit approved the site selection process and the reasoning utilized by Shintech.

Slidell Landfill, as part of its business planning and decision-making, sought to provide a low cost and easily accessible facility that was close to sources of Type III waste. Proximity to these sources is highly relevant as transportation costs limit the distance over which waste may be economically transported. The reasoning of the First Circuit in *Shintech*, in which it upheld Shintech's review of only "sites in the immediate geographic proximity to the Dow plant," is equally applicable to Slidell Landfill's decision to locate its facility near its suppliers. *Id.*, at p. 26.

Slidell Landfill also sought to exclude farmland as well as all undeveloped sites, whether non-industrial or industrial. In this regard, Slidell Landfill is again supported by existing principles enunciated by the First Circuit. Greenfield sites (i.e., those that have never been developed) and undeveloped industrial area sites (i.e., those located in an area of industrial activity, but which do not have an existing facility) "are considered the most environmentally and economically disadvantageous." *Coalition for Good Government v. LDEQ*, 99-2843, p. 20 (La. App. 1 Cir. 10/18/00), 772 So. 2d 715, 728.

Slidell Landfill also sought a location in a industrially zoned area. By locating in such a zone, the facility is ensured of having predominantly industrial or commercial, and not residential, neighbors. In turn, this lowers risks to potential receptor populations and also reduces perceived impacts on property values. Additionally, Slidell Landfill sought a site that provided ready highway access.

From these principles, optimal site or facility characteristics may be discerned:

- i. Proximity to sources of Type III waste;
- ii. Exclusion of greenfields and undeveloped industrial and non-industrial sites;
- iii. Industrial zoning;
- iv. Low population density;
- v. Ready access via highway.

The Slidell Landfill facility possesses each of these desired characteristics. As such, it is the best and most advantageous site.

Slidell Landfill is located in close proximity to its customers. A large volume of Type III waste was created as a result of the hurricane and more will be created as residents and businesses in St. Tammany Parish and the City of Slidell rebuild. The main population of St. Tammany Parish resides in the Slidell area, placing the Slidell Landfill as close to its customers as possible.

Interstate 10 runs right by the facility, with an exit on Old Spanish Trail, allowing ready access for customers. Such proximity and access lowers transportation costs and the amount of time required to complete waste transportation. Additionally, the area is zoned for industrial activity and is fronted by commercial establishments and businesses. As such, it is not in close proximity to highly dense population areas.

Of all of these characteristics, the most important to Slidell Landfill was the exclusion of greenfields and undeveloped industrial and non-industrial sites. Constructing a new facility at such a site would curtail environmental and non-environmental benefits. First, the character of undisturbed land would be forever changed without a pressing need to do so, unnecessarily compromising and destroying the aesthetic value of the predominately rural area of St. Tammany. Locating in a greenfields area would also violate the Land Use Plan discussed above. Secondly, capital resources would be diverted away from more productive uses. Third, there is no need to develop an undisturbed tract to construct a facility that will merely duplicate the equipment and services offered by the current facility.

The exclusion of such sites, with the addition of the necessary operational and design characteristics as noted above, leads inevitably to the Slidell Landfill facility as the site which meets all of the optimal characteristics. As such, there are no alternative sites that offer more protection without unduly curtailing non-environmental benefits.

5) Are there mitigating measures which offer more protection to the environment that the proposed project without unduly curtailing non-environmental benefits?

A review of the environmental control systems in place at the facility demonstrates that there are no mitigating measures which offer more protection to the environment that the proposed project without unduly curtailing non-environmental benefits.

It should be noted that the project itself is a mitigating measure. A well-run and regulated Type III waste disposal facility, such as Slidell Landfill, mitigates against open or promiscuous dumping in the area.

Mitigating measures are discussed in greater detail above. In order to avoid repetition, they will not be repeated herein, but are instead incorporated by reference into this discussion. However, there are some mitigating measures employed at the facility that should be emphasized:

- a. The facility is located in a heavily commercial area which is zoned M-2 (Intermediate Industrial).
- b. The facility is located adjacent to Coastal Waste, a municipal solid waste pick-up station.
- c. Multiple commercial establishments, such as car dealerships and other businesses, line Interstate 10 and Howze Beach Road, partially obscuring the facility from view.
- d. The waste received by the facility is construction and demolition debris and woodwaste. No putrescible waste, with its associated odors and potential for disease, is accepted.
- e. Quality controls systems, such as inspections of incoming vehicles and loads, ensure that no putrescible waste is received. These systems also ensure that no other types of prohibited wastes are received.
- f. There is a sufficient amount of clay under the site to act as an effective barrier against contaminants reaching groundwater.

g. A Stormwater Pollution Prevention Plan is in place for the facility which requires, among other things, that "best management practices" be followed by the facility. The SWPPP and the best management practices assist in ensuring that discharges from the site are in accordance with the facility's LPDES permit.

h. The facility possesses a valid LPDES permit regulating discharges from the facility. Voluntary procedures in place at the facility, including those required by the water discharge permit, ensure that all discharges are closely monitored.

i. This modification request will not impact wetlands in any way. First, actual wetlands (as opposed to jurisdictional or 'historic' wetlands) have not existed on the property for many years. Second, the expansion is primarily vertical, with very little horizontal expansion. The area to be utilized for the horizontal expansion was previously used as a 'borrow pit.' Finally, to the extent that any jurisdictional or 'historic' wetlands do exist on the property, Slidell Landfill is committed, through mitigation, to ensure that no net loss of wetlands occurs as a result of past activities at the site.

j. The facility has recently begun extensive upgrades to perimeter levees and ditches to ensure that all water leaving the site is within permitted parameters.